

**BIOGRAPHY**

## Maud Mellish-Wilson – Librarian, Editor, Visionary

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### ABSTRACT

Maud Mellish-Wilson was an early and influential voice in biomedical communication. In the early 1900s, she was hired by Mayo Clinic to set up its first library, but she accomplished a great deal more. A competent editor, she established the Clinic’s Division of Publications, which helped establish the Clinic as a world-renowned health care and research center, and probably the craft of author’s editing as well. The Division still supports authors during all stages of scientific publishing and remains a model for research centers around the world. She started *The Collected Papers of Mayo Clinic*, which summarized the articles published by Clinic authors each year; wrote an important book on medical writing and editing; and began what would become *Mayo Clinic Proceedings*. The Mayo brothers considered her to be 1 of the founders of Mayo Clinic, along with their father. Here, I describe her life and accomplishments to recognize her achievements and to contribute to the history of the profession of medical writing and editing.

Maud Mellish-Wilson was the first editor at Mayo Clinic (Figure 1). She headed the Division of Publications from its creation in 1914 to 1926 and continued to edit for the Clinic until she died in 1933.<sup>1</sup> As an early and visible author’s editor, she is credited with greatly increasing the quality and consistency of manuscripts leaving the Clinic. In her 26 years there, she set new standards for scientific publishing, wrote a book describing those standards, initiated



**Figure 1.** Maud Mellish-Wilson. Date unknown. Born Annie Maud Headline, she dropped the name Annie during her marriage to Dr Ernest Mellish, who died in 1905. She kept his name when she remarried to Dr Louis Wilson. (Used with permission from Mayo Foundation for Medical Education and Research.)

and edited the first 24 volumes of the *Collected Works of the Mayo Clinic*, launched what would become *Mayo Clinic Proceedings*, and became a legend both at the Clinic and in the scientific community.

### HER EARLY YEARS

Annie Maud Headline was born to Swedish immigrants on February 14, 1862, the youngest of 7 children.<sup>1</sup> The family lived in a log cabin near the small town of Faribault on the plains of Minnesota, 50 miles from Rochester to the south-east and 50 miles from Minneapolis to the north.<sup>1,2</sup> The Civil War had begun the year before, and in a few months, the short but bloody Dakota War of 1862, which pitted settlers against the Santee Sioux Indians, would begin not far from town.

In her childhood, she was curious, strong-minded, and practical to the point that her parents often followed her advice.<sup>1,2</sup> She wanted to be a doctor, but women were not generally allowed in medical school at that time, and money was scarce. Instead, she went to nursing school in Chicago, auditing lectures at Rush Medical School at the same time.<sup>1</sup> At Rush, her persistence and intelligence were noted by 2 prominent physicians, Dr Moses Gunn, Head of Surgery at Rush, and Dr Charles Parkes, Surgeon-in-Chief at Augustana Hospital. She developed close and lasting friendships with both men.<sup>1,3</sup> Shortly after graduating from the Illinois Training School for Nurses in 1887,<sup>4</sup> she went to work at the 50-bed Maurice Porter Memorial Hospital for Children, eventually becoming the superintendent of the hospital.<sup>2,4</sup>

In 1889, at age 27, Maud married Dr Ernest J. Mellish, a promising young surgeon teaching at Rush Medical School.<sup>1,5</sup>

Ernest had contracted tuberculosis before they married, and his health problems were to last throughout the marriage. They moved to Michigan, where Ernest built a successful surgical practice with Maud as his surgical assistant. During the marriage, she dropped her first name, Annie, and went by Maud.<sup>2</sup>

In 1893, they moved back to Chicago. Despite a severely depressed economy, Ernest found work at charity hospitals and returned to teaching at Rush. During this time, Maud began to edit his articles.<sup>2</sup> Ernest later wrote, “Maud is of inestimable aid to me in revising my papers. I am sure they are much more readable for the revision. There are no superfluous words left in them.”<sup>1</sup>

Ernest’s disease went into remission in 1897, and for 4 years, he was able to build his practice again. When the disease recurred in 1901, he and Maud moved to El Paso, Texas, where they hoped the arid environment would be beneficial. He died of tuberculosis in 1905, cared for by Maud until the end.<sup>1,2</sup>

After her husband’s death, Maud returned to Chicago and found work organizing the library at Augustana Hospital where she had friends.<sup>2,4</sup> There, at age 43, she met Dr Albert Ochsner, the chief surgeon at the hospital and an increasingly famous and prolific writer.<sup>2,6</sup> (Later, he would help found the American College of Surgeons.<sup>6</sup>) He hired Maud to edit his manuscripts, and her skill and intellect led them to become good friends and trusted colleagues.<sup>3</sup> (Dr Albert Ochsner mentored Dr Alton Ochsner, a distant relative, who would establish the Ochsner Clinic in New Orleans in 1942. In 1963, Dr Alton Ochsner was made a fellow of AMWA.<sup>7</sup>)

Mayo Clinic was founded in 1889 as part of Saint Mary’s Hospital and in cooperation with the Franciscan sisters who ran it.<sup>9</sup> The original medical staff consisted of Dr William W. Mayo and his 2 sons, William and Charles (affectionately called “Dr Will” and “Dr Charlie” by everyone at the Clinic).<sup>9</sup> The 3 introduced the integrated, multidisciplinary approach to medical care now common throughout the world. The Clinic grew rapidly in size and reputation—in 1904, the 2 brothers operated on more than 4,000 patients<sup>8</sup>—and was developing its medical specialties, laboratory facilities, educational programs, and other support services.

Dr Will was looking for someone to organize and develop a library to “run the literary end of the business.”<sup>4,10</sup> He asked his friend, Dr Albert Ochsner, if he knew someone suitable for the job. Dr Ochsner immediately recommended Maud.<sup>1,2</sup> In early 1907, after Maud had visited the Clinic at the invitation of the brothers, Dr Will wrote to her, saying “We want you, we want you badly, and the sooner the better... We want you to develop a library and to do editorial work on scientific publications.”<sup>1,2,4</sup> Having recently lost her husband, not wanting to return to nursing, and feeling that it was too late to go to medical school at age 45, Maud joined the Clinic 3 months later.<sup>1,2,11</sup>

## HER YEARS AT MAYO CLINIC

When Maud arrived at the Clinic, the library consisted of “three small book cases, a few journals on a small reading table, and the books owned by various members of the staff.”<sup>1,12</sup> She also reportedly found copies of dozens of publications by the Mayo brothers and their father stored in a basement coal bin.<sup>1,2,11</sup> She pulled the papers from the coal bin, cleaned and organized them, collected books and articles from around the Clinic, ordered missing journal volumes, arranged for interlibrary loans, and, in general, created order out of chaos.<sup>1</sup>

She built the collection carefully to meet the specific needs of the Clinic. After WWI, many European libraries were sold, and the Clinic was able to add several rare and important books to fill gaps in its collection.<sup>1</sup> She also visited medical libraries around the country to collect ideas for the design of a new library that opened in 1914.<sup>2</sup> Within a few years, she had increased the library holdings to more than 4,000 volumes.<sup>13</sup> When she died in 1933, there were 40,000.<sup>1</sup>

Dr Louis B. Wilson (1866-1943) was brought to the Clinic to develop its laboratory services as Chief of Pathology, a position he held from 1905 to 1937.<sup>14</sup> He met Maud shortly after she began working at the Clinic, when they were given the task of designing the new library for the 1914 expansion of the Clinic. Maud said of him, “I have met few men his intellectual equal. In addition to his scientific abilities, he has a most pleasing personality.”<sup>1</sup> Louis’s first wife died in 1920, and he and Maud married in 1924.<sup>2,4</sup> Louis would become the first director of Mayo Foundation and was a national leader in graduate medical education in the 1920s and 1930s.<sup>15</sup>

## The Division of Publications

When Maud became the Clinic’s first professional editor,<sup>13</sup> she had had close to 20 years of experience helping authors prepare manuscripts for publication which, in her view, “did not stop at checking grammar and punctuation.”<sup>13</sup> (An understatement, to be sure.) When Dr Will noted that the quality of the articles written by Clinic staff “was not up to the standard of their clinical work,”<sup>2</sup> he asked Maud to help authors improve their writing. Soon, in addition to managing the library, she became head of the new editorial office and later, the head of the new Division of Publications in 1914.<sup>1,4,12</sup> Advances in printing had improved the reproducibility of photographs and medical illustrations and made them less expensive to publish. In time, 4 photographers (Maud made a point of hiring women photographers) and 2 medical illustrators were added to the Division.<sup>1,11,16</sup> She designed a clin-

ic-wide system for registering, editing, submitting, revising, and tracking manuscripts through the publication process, a centralized service that continues today.<sup>12</sup>

According to one biographer, Maud “set herself the task of seeing to it that the Rochester men said what they meant to say, that they were accurate in their facts and, as far as she could ensure it, straight in their thinking.”<sup>1</sup> One story goes that Dr Charlie left a paper for Maud to edit while he was away for several weeks. He returned to find an article on his desk, read it, liked it, and wondered who had written it—until he realized it was his paper made better by Maud’s editing.<sup>2,13</sup> (Dr Charlie, as Editor-in-Chief of *Postgraduate Medicine*, received AMWA’s 1958 Honor Award for Distinguished Contributions to the Medical Literature.<sup>7</sup>)

In fact, between 1909 and her death in 1933, not a single manuscript left the Clinic until it met her standards.<sup>13,14</sup> She gave recalcitrant authors a choice: bring your paper up to standard or publish it under your own name, without the Clinic’s support. Or, as her future successor, Dr Richard Hewitt, said, “The paper... either descended by slow degrees into desuetude [a state of disuse] or was elevated to the heavens and has a star named after it.”<sup>12</sup>

This policy paid off as journal editors noticed that every paper they received from the Clinic was technically sound and unusually well prepared.<sup>1</sup> There is little doubt that Maud’s efforts greatly improved the Clinic’s publications, which substantially advanced its reputation, as well as that of its staff at a critical period in the Clinic’s history.<sup>13</sup> (This reputation has persisted for more than 80 years. Ed Huth, then Editor-in-Chief of the *Annals of Internal Medicine*, told me in the early 1990s that, “When you get a manuscript from Mayo Clinic, you just know it’s going to be tightly edited, formatted correctly, and a pleasure to read.” If ever there were an argument for insisting on rigorous editing and high standards, this is it.)

### ***The Collected Papers of Mayo Clinic***

In the early 1900s, physicians and hospitals generally did not advertise because such promotion was considered improper if not unethical. As a result, the Mayo brothers kept a low profile—including turning down an interview with *Life* magazine—to avoid the appearance of impropriety.<sup>2</sup> However, they were aware that physicians built their reputations by publishing in scientific journals, which of course was why they hired Maud. With Maud, however, they got more than just a librarian and an editor: they got a visionary.

In 1909, Maud selected the most important papers written by Clinic authors since 1905 (apparently including

some rescued from that coal bin) and published them as the *Collected Papers by the Staff of St. Mary’s Hospital Mayo Clinic*<sup>1</sup> “to present adequately the work of the Mayo Clinic and the Mayo Foundation.”<sup>17</sup> The volume was the first of a series that continued for decades as *The Collected Papers of Mayo Clinic*.

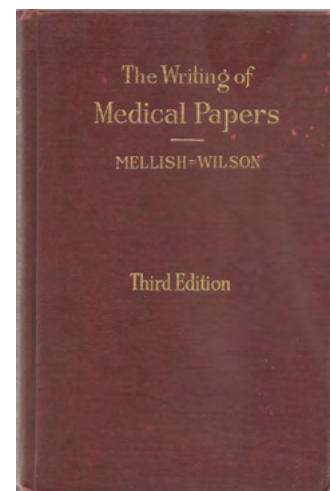
The *Papers* increased the Clinic’s professional visibility in a way that individual articles could not. For example, volume 1 was 686 pages; volume 15, published in 1924, was 1,420 pages. Of “629 papers published [in volume 46] between December 1, 1953, and November 30, 1954, 63 are republished in full, 52 by abridgement, 20 by abstract, and 495 by title.”<sup>17</sup> Maud edited and published at least 1 volume every year until her death in 1933. The volumes she edited represented more than 6,000 articles.

### ***The Writing of Medical Papers***

In 1922, Maud published *The Writing of Medical Papers* (Figure 2).<sup>18</sup> Although it was not the first book on the topic,<sup>19–21</sup> it appears to have been among the most popular, going through 3 editions in 1922, 1925, and 1929. The book itself is a grammar and usage guide, a style manual, a textbook on preparing scientific articles, a reference for journal abbreviations, a summary of proofreader’s marks, and an explanation of publication practices.

Of the 20 chapters, 7 are devoted to grammar and usage in medical publications (describing many conventions still followed today), and the last 13 concern preparing the scientific article and its parts, including the use of abbreviations, scientific style, and the importance of revising. In a summary at the end of each chapter, the topics were “reduced to a minimum, and rules have been made definite, even dogmatic, that they may be easy to refer to and follow” (Box on next page).<sup>18</sup>

The text is strictly utilitarian, but Maud’s humor often comes through. Many sentences are statements about what authors should do when writing, such as “use standard abbreviations only,” “writers should not be too ready to



**Figure 2.** Maud’s book, *The Writing of Medical Papers*.<sup>18</sup> The book appears to be one of the earliest and most popular guides for preparing medical articles. Much of the content is still relevant. Used with permission of Mayo Foundation for Medical Education and Research.

## Quotes from *The Writing of Medical Papers* by Maud Mellish-Wilson<sup>18</sup>

“A good writer addresses persons who have to comprehend, to decide, and to act.” [This sentence is the very definition of technical writing.]

“It is quite possible for the casual writer to be wholly inappreciative [sic] of the time and care expended by editors in recasting and checking tabulated data.”

“Don't fail to go over your pages diligently; relentlessly 'thin out' words. A good writer takes a hint from a good gardener.”

“Don't rise to poetic heights except when describing genuinely poetic subject matter.”

“Many writers pay little serious attention to their introductions... At no time is bewilderment more fatal for the reader than at the start... starting is as much more difficult than continuing for a reader as it is for a locomotive attached to a heavy train.”

“Don't estimate measurements [of tumors] in terms of cocoanuts, oranges, fists, eggs, beans, and so forth; use the metric system.” (Gotta love that one.)

“... few realize the amount of earnest effort and painstaking labor which a conscientious editor bestows upon many a paper to make it readable and worthwhile.” (Well said!)

follow others in the misuse of terms or words,” and “do not submit a manuscript for publication until it has been made as perfect as possible.”

Chapter 7, titled simply “Don'ts,” includes sound advice:

- “Don't say *case* when you mean *patient*.”
- “Don't say *due to* when you mean *attributable to* or on *account of*. *Due to* is inaccurate and slovenly.”
- “Don't begin as many as ninety-five percent of your sentences with *thus*.”
- “When writing a medical paper, don't always go back to the Garden of Eden and review the literature to date.” (Elsewhere, she explains this advice: “The order of development of a subject is rarely the order in which it should be studied... review the more recent articles first.”)<sup>22</sup>
- “Keep down your *that's*, for they multiply like lower organisms.”
- “Do not invent words.”

In the 3rd edition, she writes, “It would seem that an impression is abroad among the writers of academic essays that the first person is indecent.”<sup>23</sup> Her endorsement of using first-person pronouns in medical texts is consistent with the recommendation of George Gould, an important early journal editor and one of the founders of what would become the American Medical Library Association, who gives the same advice in *Suggestions to Medical Writers*, published in 1900.<sup>19</sup> Her book may also have influenced George Simons and Morris Fishbein, then the editors at the *Journal of the American Medical Association*, in their book, *The Art and Practice of Medical Writing*.<sup>24</sup>

Chapter 18, titled “The Manuscript,” reads like the instructions for authors found today in every journal. She recommended a variation of the Harvard (name-date) referencing system in which articles are alphabetized by the first author's last name in the reference list, numbered sequentially, and then the numbers placed in the text, not the first author's last name and date of publication as they are in the Harvard system.

### *Mayo Clinic Proceedings*

As the Clinic grew, not every staff member could attend all meetings. In 1919, Maud and her division began to prepare short, daily summaries of the meetings in an in-house newsletter called the *Clinic Bulletin*.<sup>9,11</sup> In 1926, the focus of the *Bulletin* was narrowed to the topics covered in what appears to have been weekly grand rounds.<sup>9,11,25</sup> The name was changed to the *Proceedings of the Staff Meetings of the Mayo Clinic* in 1927 and to *Mayo Clinic Proceedings* in 1964, when an editor-in-chief and an editorial board were appointed to make the *Proceedings* a separate, monthly, peer-reviewed medical journal.<sup>9</sup>

### HER LEGACY

Today, the main library of the Clinic stands where Maud's library stood. It now includes 400,000 volumes. In fact, the Clinic runs 15 other libraries in 4 states and employs more than 30 professional librarians and 40 library associates. In 2021, the 5,300 physicians and researchers throughout the Mayo Clinic Health System published 12,500 articles and case reports and an unknown number books, chapters, letters, comments, and other publications. (Personal communication with LeAnn Stee, Head, Scientific Publications, Mayo Clinic, 4 April 2022.) The *Collected Papers* went through 60 volumes before publication stopped in 1969. In 2019, the *Proceedings* was sent without charge to 130,000 people around the world. In 2020, it ranked eleventh among 154 general internal medicine journals indexed in *Journal Citation Reports*.<sup>26</sup>

When Maud died in 1933, Dr Hewitt became Head of the Division of Publications. In 1957, he became President of AMWA.<sup>7</sup> In 1964, the Clinic created the Department of Biomedical Communications. Its first director was a prominent physician named Dr Charles Roland, who became President of AMWA in 1969.<sup>7</sup>

## MAUD REMEMBERED

Maud was described as “a tall, handsome woman, regal in appearance and in manner”<sup>1</sup> who had “the ability to do well a great deal in a short time.”<sup>12</sup> “She was a severe critic, never minced words in expressing her opinion, and was inclined to be high-handed in correcting and revising.”<sup>1</sup> (My favorite quote from her book is, “Don’t think that [grammatical] atrocities are pardonable.”<sup>23</sup>)

Dr Will said of her, “Staff members, faculty, and fellowship men alike received much aid in the preparation of their written contributions. They were taught where and how to obtain references from the library, to be accurate and concise, with proper literary form, and, above all, to give credit to other workers, and not by half-truths to over-emphasize unimportant details, which might lead to misconstruction.”<sup>12</sup> Maud was made an honorary member of Mayo Clinic faculty in the late 1920s.<sup>1,14</sup>

Actress Megan Cole portrays Maud in a 30-minute documentary on her life.<sup>3,13</sup> To prepare for the part, she studied Maud’s life and work. Curiously, Maud, who contributed so much to the field of medical writing, did not like to write and rarely wrote anything down. As a result, most of what Ms Cole learned about Maud came from others.<sup>13</sup> (The 2 best sources being those by Clapesattle<sup>1</sup> and Wright-Peterson.<sup>2</sup>)

According to Ms Cole, it is clear that Maud “was a gentle powerhouse, a compassionate taskmaster, and an intimidating scholar who didn’t boast about her accomplishments.”<sup>13</sup> Vitaly important to the growth of the Clinic and in building its reputation, she was “a brilliant editor and a woman far ahead of her time, one who raised a fairly traditional position to heights not previously imagined.”<sup>13</sup>

On the day of Maud’s funeral, the Clinic was closed in her honor.<sup>3</sup> But perhaps the most appropriate honor was given by Dr Will himself, who considered Maud to be the 4th founder of the Clinic, after he, his brother, and their father.<sup>1,2</sup> He wrote that she “was endowed with exceptional ability, untiring perseverance, sound judgment, and indomitable courage,” and “dedicated her life to the literary development of Mayo Clinic.”<sup>2</sup> Indeed, the profession of medical writing owes much to her contributions.

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